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10/033,127	10/22/2001	Wolfgang Schonberger	A-2986	7101

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LERNER AND GREENBERG, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480

EXAMINER

HINZE, LEO T

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,127

Applicant(s)

SCHONBERGER, WOLFGANG

Examiner

Leo T. Hinze

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2003 and 05 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2854

DETAILED ACTION

Specification

1. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because of the large number of changes to the specification contained in the papers filed on 21 February 2003 and 5 March 2003.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

Claim Objections

2. Claim 6 is objected to because of the following informalities:

Claim 6 uses the term "said first-mentioned roller." There is insufficient antecedent basis for this limitation in the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2854

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke et al. USPN 4,089,264, in view of Rambausek.

Jeschke teaches:

- an inking unit (Figure 1) in a printing press, comprising an ink-metering device (1) having at least one metering element (6) operatively engaging with a roller, and an oscillation device (11,13) assigned to said metering element for mounting said metering element so that it is oscillatable between an engaging position and a spaced-away position with respect to the metering element, wherein said metering element is lifted to an outlet height of 300 micrometers (e.g. col. 4, line 4) from said roller (claim 1);
- an inking unit wherein said oscillation device has an electromagnetic (11, 13) oscillation drive drivingly connected to said metering element (claim 3);
- an inking unit wherein said oscillation device has a spring (15) for setting said metering element against said roller (claim 4);
- an inking unit including at least another metering element assigned to said roller (e.g. Figure 2, ref. 9) (claim 8);
- an inking unit wherein said metering elements are mounted alternatingly with one another for removal thereof from said roller (e.g. Figure 2) (claim 9);

Art Unit: 2854

- a printing press (e.g. col. 1, lines 1-2) having an inking unit (Figure 1) comprising an ink-metering device (1) having at least one metering element (6) operatively engaging with a roller (2), and an oscillation device (11,13) assigned to said metering element for mounting said metering element so that it is oscillatable between an engaging position and a spaced-away position of the metering element (claims 10 and 12);
- controlling the frequency (e.g. col. 4, line 2) of oscillation of the metering element.

Jeschke does not teach:

- said roller being one of an ink form roller and a roller operatively engaging with an ink form roller (claims 1 and 10);
- wherein said metering element is lifted to an outlet height of at least 20 micrometers and less than 100 micrometers from said roller (claim 1);
- wherein the metering element is oscillatable at a frequency within a range of 200 Hz to 10kHz (claim 12).

Rambausek teaches said roller being one of an ink form roller (7) and a roller (8) operatively engaging with an ink form roller (e.g. Figure 1) (claims 1, 10, and 12).

Regarding claims 1, 10, and 12, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Jeschke to engage the metering element on one of an ink form roller and a roller operatively engaging with an ink form roller because Rambausek teaches that this allows extremely short travel distances of ink to the plate cylinder (e.g. col. 2, lines 14-15).

Further regarding claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke wherein said metering element is lifted to

Art Unit: 2854

an outlet height of at least 20 micrometers and less than 100 micrometers from said roller, because one having ordinary skill could easily determine the optimum range of the outlet height in the course of routine experimentation.

Regarding claims 3, 4, 8, and 9, the combination of Jeschke and Rambausek teaches all that is claimed as discussed above.

Regarding claim 11, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke wherein said metering element is lifted to an outlet height is between 20 micrometers and 40 micrometers, because one having ordinary skill could easily determine the optimum range of the outlet height in the course of routine experimentation.

Regarding claim 12, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke wherein the metering element is oscillatable at a frequency within a range of 200 Hz to 10kHz, because one having ordinary skill could easily determine the optimum frequency range of oscillation in the course of routine experimentation.

5. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke et al., USPN 4,089,264 in view of Rambausek as applied to claim 1 above, and further in view of Cappel et al., USPN 3,913,479.

Jeschke and Rambausek together teach all that is claimed as discussed in the above rejection of claim 1.

Jeschke and Rambausek do not teach:

- wherein said oscillation device has a guide for guiding said metering element in an at least approximately radial oscillation direction relative to said roller (claim 2);

Art Unit: 2854

- an inking unit wherein said metering element is a metering blade having a working region terminating in a cutting edge, said working region of said metering blade having a cross-section thickness which remains constant (claim 5).

Cappel teaches:

- wherein said oscillation device has a guide (92, 93) for guiding said metering element in an at least approximately radial oscillation direction relative to said roller (claim 2);
- wherein said metering element is a metering blade (75) having a working region terminating in a cutting edge, said working region of said metering blade having a cross-section thickness which remains constant (e.g. Figure 3) (claim 5).

Regarding claims 2 and 5, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke wherein said oscillation device has a guide for guiding said metering element in an at least approximately radial oscillation direction relative to said roller, and wherein said metering element is a metering blade having a working region terminating in a cutting edge, said working region of said metering blade having a cross-section thickness which remains constant, because Cappel teaches that such an embodiment allows precision metering and of ink and is capable of operating over long periods of time without readjustment.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke et al., USPN 4,089,264 in view of Rambauser as applied to claim 1 above, and further in view of Olawsky et al.

Jeschke and Rambauser together teach all that is claimed as discussed in the above rejection of claim 1.

Art Unit: 2854

Jeschke and Rambausek do not teach including at least one glazing roller disposed downline from said metering element along a peripheral line of said first-mentioned roller, said glazing roller being exclusively in rolling contact with said first-mentioned roller.

Olawsky teaches a rider roller thrown onto a roller downstream from a doctor blade (e.g. col. 1, lines 36-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke to include at least one glazing roller (rider roller) disposed downline from said metering element along a peripheral line of said first-mentioned roller, said glazing roller being exclusively in rolling contact with said first-mentioned roller, because Olawsky teaches that a glazing (rider) roller is effective for smoothening of the ink film before the ink is applied to the inking form.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke, et al., USPN 4,089,264 in view of Rambausek as applied to claim 1 above, and further in view of Uera, et al.

Jeschke and Rambausek together teach all that is claimed as discussed in the above rejection of claim 1.

Jeschke and Rambausek do not teach an inking unit including an ink-feeding device disposed upline of said metering element alongside a peripheral line of said roller.

Uera teaches an inking unit including an ink-feeding device (2) disposed upline of said metering element (411) alongside a peripheral line of said roller (3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jeschke to include an ink-feeding device disposed upline of said metering

Art Unit: 2854

element alongside a peripheral line of said roller, because Uera teaches that this is an equivalent, alternative means for feeding ink.

Response to Arguments

8. Regarding applicant's arguments with respect to the allowability of claims 1 and 12, while Jeschke does not specifically teach the claimed ranges of outlet height and oscillation frequency, respectively, Jeschke does teach that outlet height and oscillation frequency are important parameters. Therefore, one having ordinary skill in the art could determine the optimum ranges of outlet height and oscillation frequency through routine experimentation, as discussed in the above rejections of claims 1 and 12.

9. Regarding applicant's arguments with respect to the rejection of claim 9, that the Jeschke reference does not disclose an inking unit in which the metering elements are mounted alternately with each other such that they can be lifted off of the roller, Fig. 2 of Jeschke shows at least one metering element operatively engaging with a roller, and at least another metering element assigned to said roller, mounted alternately with one another for removal thereof from said roller.

10. Regarding applicant's arguments with respect to the rejection of claim 5, that the Cappel et al. reference discloses a metering bar (75) that is not suitable for replacing the ink knife (6) disclosed in the Jeschke et al. reference, Jeschke does not teach that the working area of the ink knife must (emphasis added) essentially be profiled as a triangle and therefore should not have a constant cross-sectional area. Jeschke instead teaches that "various modifications and structural changes may be made therein without departing from the spirit of the invention" (col. 3, lines 16-17). The suggestion to combine the metering bar of Cappel with the invention of Jeschke does not imply a wholesale

Art Unit: 2854

replacement of the Jeschke metering device with the Cappel device. Instead, a replacement of the stripper edge (7) of Jeschke with the constant cross-sectioned tip (76) of Cappel would provide the benefits of inexpensive construction and long operating periods substantially free of maintenance taught by Cappel.

11. With respect to applicant's arguments concerning the rejection of claim 10, applicant should note that claim 10 was not amended as described in applicant's arguments.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (703) 305-3339. The examiner can normally be reached on M-F 8:00-5:30.

Art Unit: 2854

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0952.

Leo T. Hinze

Leo T. Hinze
Patent Examiner
AU 2854
May 1, 2003

Andrew H. Hirshfeld
ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800